

AUTHOR INDEX

Canadian Journal of Soil Science, Volume 69, 1989

- Acton, D. F., 153
Alexander, E. B., 180
Alexander, K. G., 295
Anderson, D. W., 63
Angers, D. A., 373
- Bailey, L. D., 461
Barager, F. A., 817
Bates, T. E., 597
Beauchamp, E. G., 49, 391
Beke, G. J., 273, 639
Belanger, G., 875
Bennett, D. R., 263
Berry, G. J., 683
Bettany, J. R., 739
Bhereur, P., 705
Black, J. M. W., 813, 817, 835
Bodley, C. L., 683
Bole, J. B., 867
Bowren, K. E., 199
Brais, S., 705
Bremer, E., 243
Brovold, S. L., 895
Bui, E. N., 677
Burney, J. R., 799
Bustin, R. M., 287
Buttery, B. R., 165
- Caillier, M. J., 525
Campbell, C. A., 551
Carefoot, J. M., 515, 867
Carson, D., 433
Chanasyk, D. S., 813, 817, 835
Chang, C., 443
Channappa, T. C., 639
Chomistek, W., 25
Chow, T. L., 223
Clark, N. F., 25
Cline, R. A., 649
Coderre, D., 705
Coen, G. M., 1
Comerford, N. B., 111
Coote, D. R., 611
Cote, D., 39
Courchesne, F., 337
Cowell, L. E., 243
Culley, J. L. B., 701
- Dawley, W. K., 199
De Kimpe, C. R., 433, 451, 489, 663
De Jong, E., 629
- Dormaar, J. F., 481
Drennan, D. S. H., 567
Drury, C. F., 391
Dudas, M. J., 171, 721
Duval, J., 417
- Eaton, L. J., 303
Edwards, L. M., 799
Entz, T., 263, 639, 867
Evans, L. J., 391
Evenden, W. G., 351, 751
- Foster, N. W., 501
Frossard, E., 401
- Gagnon, D., 705
Gamble, D. S., 313, 649
Gameda, S., 417
Germida, J. J., 889
Gough, N. A., 235
Grant, C. A., 461
Grevers, M. C. J., 629
Grigal, D. F., 895
Groenevelt, P. H., 181
Gupta, U. C., 473, 885
Gupta, V. V. S. R., 889
- Hartman, M. D., 381
Hedayat, M. W., 367
Hendershot, W. H., 337
Hodge, N., 119
Hogue, E. J., 715
Hoyt, P. B., 715
- Ivany, J. A., 711
- Jeglum, J. K., 683
Jensen, K. I. N., 711
Jha, A. K., 849
- Karamanos, R. E., 119
Kay, B. D., 127, 579
Kimball, E. R., 711
Knowles, R., 33
Koch, J. T., 127, 579
Kowalenko, C. G., 825
Krause, H. H., 188, 437
Kucey, R. M. N., 425, 695
- Lamarre, M., 779, 785
Landsburg, S., 327

- Lange, G. L., 579
Lavkulich, L. M., 213
Leggett, M. E., 425
Leyshon, A. J., 551
Li, L., 879
Lindwall, C. W., 443, 481, 639
Lowe, L. E., 17, 287
Lu, S., 97
- MacKay, D. C., 515
Mahendrappa, M. K., 188
Malhi, S. S., 199, 543
Malik, N., 567
Martin, D. E., 17
Martin, H. D., 181
Maule, C. P., 171
McKenna-Neuman, C., 79
McKenzie, R. C., 25
McKyes, E., 489
Mehuys, G. R., 373, 417
Mermut, A. R., 677
Miles, N., 433
Miller, J. J., 153, 273
Miller, M. H., 97, 295
Moore, T. R., 33
Morden, G. W., 367, 689
- Ndayegamiye, A., 39
Neilsen, G. H., 715
Nickling, W. G., 79
Nolin, M. C., 525
Nord, W. S., 895
Nuttall, W. F., 199
Nyborg, M., 381, 543
- Ohmann, L. F., 895
- Page, F., 451
Patriquin, D. G., 303
Paul, E. A., 63
Paul, J. W., 49
Pawluk, S., 273
Payette, S., 779, 785
Pollock, R. J., 751
- Rachar, D. B., 127
Racz, G. J., 689
- Raghavan, G. S. V., 417
Rees, H. W., 223
Richards, J. E., 597, 875
Roberts, T. L., 739
Ross, G. J., 649, 879
Rutherford, G. K., 879
- Schnitzer, M., 253
Schuppli, P., 253
Selles, F., 551
Shah Singh, S., 611
Sheppard, S. C., 351, 751
Simard, R. R., 663
Singh, J. S., 849
Singleton, G. A., 213
Skinner, M. F., 111
Smith, A. E., 587
Solberg, E. D., 543
Sommerfeldt, T. G., 515
Soper, R. J., 367
Spiers, G. A., 721
Srivastava, S. C., 849
St. Arnaud, R. J., 153, 401, 629
Stevenson, D. S., 769
Stewart, J. W. B., 119, 401, 739
Stone, J. A., 165, 181
Swift, D. E., 437
- Tollenaar, M., 295
Topp, G. C., 701
Turchenek, L. W., 721
- Van Kessel, C., 243
Van Lierop, W., 191, 235
Van Praag, H. J., 187
Voroney, R. P., 63
Vyn, T. J., 181
- Walker, A., 587
Walker, G. K., 295, 857
Wang, C., 1, 525, 611
Weill, A. N., 489
Weissen, F., 187
Wilson, J. P., 137
Winter, K. A., 885
- Zizka, J., 663

SUBJECT INDEX

Canadian Journal of Soil Science, Volume 69, 1989

- Acid soils
 - EDTA and DTPA extractable P, 191
- Adsorption
 - adsorption-desorption of ^{14}C -fluridone, 567
- Aeolian
 - entrainment of sediment by wind, 79
- Aggregate stability
 - influence of cropping on aggregation and carbohydrates, 373
- Aggregate breakdown
 - aggregate breakdown in an MRRS, 817
 - evaluation of an MRRS, 813
- Aggregation
 - soil aggregation in relation to field parameters, 835
 - tillage and manure effect on soil aggregation, 489
- Alberta
 - saturated hydraulic conductivity from soil morphology, 1
- Alfalfa
 - influence of cropping on aggregation and carbohydrates, 373
- Aluminum
 - dissolution des composés ferrugineux et alumineux, 451
- Ammonia
 - acid input to agricultural soils, 611
- Ammonium
 - N and S mineralization/immobilization, 501
- Ammonium acetate
 - measurement of available K in Ontario soils, 597
- Ammonium fixation
 - fixation and immobilization of NH_4^+ in soils, 391
- Ammonium (NH_4)
 - fertilisation du tabac à cigarette, 779
- Ammonium nitrate
 - N dynamics in Saskatchewan winters, 551
- Apparent dielectric constant
 - subsurface drains located by radar, 223
- Apple
 - K deficiency of apple, 715
- Apple trees
 - drainage from irrigated orchard lysimeters, 769
- Aromaticity
 - extraction of organic matter from soils by two methods, 253
- Atrazine
 - prediction of persistence of triazine herbicides, 587
- Audible buzzer
 - measurement of water depth in wells, 683
- Available soil Mn and Cu
 - S \times Mn \times Cu nutrition of canola, 119
- Azote (NO_3)
 - variation saisonnière des éléments nutritifs dans le sol, 785
- Band placement
 - effect of placement method on N recovery, 543
- Barley
 - influence of cropping on aggregation and carbohydrates, 373
 - placement effect on N urea utilization in drought, 381
 - spring and fall N, 199
- Basaltic saprolite
 - smectites in saprolite and tills, 879
- Bean (field)
 - bean and pea N fixation over growing season, 695
- Benomyl
 - VA mycorrhizae and P, Zn absorption by maize, 97
- Biomass N
 - microbial C, N and P in mine spoils, 849
- Biomass P
 - microbial C, N and P in mine spoils, 849
- Biotite
 - oxygen plasma treatment of Fe^{2+} -bearing minerals, 433
- Blackbean
 - effect of zinc addition on blackbeans, 367
- Brassica napus*
 - penicillium bilaji* increases canola P uptake, 425
- Bulk density
 - bulk density in surface soils and peat, 895
 - minimum tillage on chernozemic clay loam, 443
- Calcareous
 - effect of zinc addition on blackbeans, 367
- Calcareous soils
 - EDTA and DTPA extractable P, 191
- Calcium
 - variation saisonnière des éléments nutritifs dans le sol, 785
 - Zn and P fertilizer on flax, 461
- Calcium concentration
 - hydrolysis of dicalcium phosphate dihydrate, 689

- Canola
S \times Mn \times Cu nutrition of canola, 119
- Carbohydrates
influence of cropping on aggregation and carbohydrates, 373
- Carbon-13
extraction of organic matter from soils by two methods, 255
- Carbon dioxide
water table levels and gas emissions from peat, 33
- Catenary sequence
organic C, N, P, and S in western Canadian soils, 739
- Cation exchange capacity
effects of manure on soil fertility, 39
- Cereal residue
freeze-thaw effects on soil erosion, 799
- Chemical recalcitrance
crop residue decomposition, 63
- Chernozem
effects of pipeline construction on soil horizons, 327
N fertilizer applied with wood shavings manure, 515
organic C, N, P, and S in western Canadian soils, 739
- Chronofunctions
calibration of soxhlet soil chronofunctions, 213
- Citrate
residual P solubility in a forested soil, 111
- Citric acid
K and Mg dynamics in Quebec soils, 663
- Clay fixation
fate of applied ^{15}N in a Fraser Valley soil, 825
- Clay mineralogy
soil parent materials of northeast Alberta, 721
- Clay soil
persistence of tillage and compaction in a clay soil, 417
soil separates and ^{137}Cs , 171
- Climate change
weather sensitivity in western Canadian wheat, 857
- Clod samples
soil bulk density equations, 177
- Compaction
freeze-thaw effects on soil erosion, 799
persistence of tillage and compaction in a clay soil, 417
- Computed-tomography scanning
soil macroporosity by CT scanning, 629
- Concentration ratio
radionuclides in crops, 751
- Conditioners
bonding efficiency of a polymeric soil conditioner, 579
- Copper and molybdenum interaction
S \times Mn \times Cu nutrition of canola, 119
- Corn
influence of cropping on aggregation and carbohydrates, 373
ridge-tillage and soil moisture and temperature, 181
- Coupling agents
bonding efficiency of a polymeric soil conditioner, 579
- Course-textured soils
moisture retention in coarse-textured soils, 263
- Crop residues
crop residue decomposition, 63
- Cyanazine
prediction of persistence of triazine herbicides, 587
- Degradation
forages and aggregation, 165
- Delta ^{15}N
fate of applied ^{15}N in a Fraser Valley soil, 825
- Denitrification
fate of applied ^{15}N in a Fraser Valley soil, 825
- Depth probe
measurement of water depth in wells, 683
- Desorption
adsorption-desorption of ^{14}C -fluridone, 567
- Dicalcium phosphate dihydrate
hydrolysis of dicalcium phosphate dihydrate, 689
- Dissolution
sulfate retention in Podzolic soils from Quebec, 337
- Drainage
drainage from irrigated orchard lysimeters, 769
- Drought stress
placement effect on N urea utilization in drought, 381
- Dry aggregates
soil changes under minimum tillage, 481
- DTPA
simultaneous K and Na extraction, 235
- E4:E6 ratios
extraction of organic matter from soils by two methods, 253
- EDTA
simultaneous K and Na extraction, 235
- Electro-ultrafiltration
measurement of available K in Ontario soils, 597

- Electromagnetic inductance meters
 - conversion to EM38 readings to weighted EC_e values, 25
- Electromagnetic wave
 - subsurface drains located by radar, 223
- Electronic circuitry
 - measurement of water depth in wells, 683
- Empirical models
 - moisture retention in coarse-textured soils, 263
- Enzyme activities
 - soil changes under minimum tillage, 481
- Enzymes
 - microbially mediated fate of iodide in organic soils, 127
- Erosion
 - aggregate breakdown in an MRRS, 817
 - evaluation of an MRRS, 813
 - freeze-thaw effects on soil erosion, 799
 - sediment and runoff water characteristics, 639
 - soil aggregation in relation to field parameters, 835
 - soil erosion in the Lake Simcoe-Couchiching Basin, 137
- Estimating
 - saturated hydraulic conductivity from soil morphology, 1
- Evaporite mineralogy
 - evaporite mineralogy and chemistry of a saline seep, 273
- Extractable sulfate sulfur
 - microbial biomass S as influenced by soil moisture, 889
- Fall application
 - effect of placement method on N recovery, 543
- Fallout cesium
 - soil separates and ¹³⁷Cs, 171
- Fallow
 - soil changes under minimum tillage, 481
- Feldspar morphology
 - soil parent materials of northeast Alberta, 721
- Fer
 - dissolution des composés ferrugineux et alumineux, 451
- Fertility
 - grouping soil units for fertility interpretations, 525
- Fertilizer
 - translocation of applied P, 875
- Fertilizer efficiency
 - penicillium bilaji* increases canola P uptake, 425
- Fertilizer nitrogen
 - soil nitrate depth on soft white wheat production, 867
- Fertilizer placement
 - Zn and P fertilizer on flax, 461
- Fertilizer positional unavailability
 - placement effect on N urea utilization in drought, 381
- Fertilizing in winter
 - N dynamics in Saskatchewan winters, 551
- Field
 - correcting soil water content readings from IRAMS, 701
- Flax
 - N fertilization of intercropped legumes, 243
 - Zn and P fertilizer on flax, 461
- Fluridone
 - adsorption-desorption of ¹⁴C-fluridone, 567
- Forest fertilization
 - nitrogen translocation after urea addition, 437
- Forest floor
 - N and S mineralization/immobilization, 501
- Forme d'azote
 - fertilisation du tabac à cigarette, 779
- Freeze-thaw
 - freeze-thaw effects on soil erosion, 799
- Frequency distribution
 - partition coefficients for Mn in soil, 351
- Frozen soils
 - N dynamics in Saskatchewan winters, 551
- Gleying
 - criteria for classifying Gleysolic soils, 153
- Glycine max* L.
 - ridge-tillage and soil moisture and temperature, 181
- Grasses
 - forages and aggregation, 165
- Greenhouse
 - selenium in forages and cereals, 885
- Ground-penetrating radar
 - subsurface drains located by radar, 223
- Groundwater
 - microbially mediated fate of iodide in organic soils, 127
- Groundwater chemistry
 - evaporite mineralogy and chemistry of a saline seep, 273
- Gyttja
 - hydrolysis of S in peat humic acids, 287
- Herbicide
 - adsorption-desorption of ¹⁴C-fluridone, 567
 - prediction of persistence of triazine herbicides, 587
- Hierarchical relationships
 - organic C, N, P, and S in western Canadian soils, 739

- Horizons B podzoliques
dissolution des composés ferrugineux et
alumineux, 451
- Hornblende
oxygen plasma treatment of FE^{2+} -bearing
minerals, 433
- Humic acids
extraction of organic matter from soils by two
methods, 253
- Humic material
soil separates and ^{137}Cs , 171
- Hydraulic conductivity
minimum tillage on chernozemic clay loam, 443
- Hydrology
measurement of water depth in wells, 683
- Hydrolysis
hydrolysis of dicalcium phosphate dihydrate, 689
- Hydrolyzable-S
hydrolysis of S in peat humic acids, 287
- Hydroponics
yield of hydroponically and soil-grown maize,
295
- Image analysis
quantification of soil calcium carbonates, 677
soil macroporosity by CT scanning, 629
- Immobilization
fixation and immobilization of NH_4^+ in soils,
391
- Immobilization of N
effect of placement method on N recovery, 543
- Incorporation
effect of placement method on N recovery, 543
- Infiltration
minimum tillage on chernozemic clay loam, 443
- Interaction
spring and fall N, 199
- Intercropping
N fertilization of intercropped legumes, 243
- Interpretive grouping
grouping soil units for fertility interpretations,
525
- Iodine-129
microbially mediated fate of iodide in organic
soils, 127
- IR spectra
extraction of organic matter from soils by two
methods, 253
- Irrigation
drainage from irrigated orchard lysimeters, 769
- Irrigation suitability
moisture retention in coarse-textured soils, 263
- Isotherm
adsorption-desorption of ^{14}C -fluridone, 567
- Isotopic exchange
partition coefficients for Mn in soil, 351
- Kinetics
K and Mg dynamics in Quebec soils, 663
- Leaching
acid input to agricultural soils, 611
calibration of soxhlet soil chronofunctions, 213
fate of applied ^{15}N in a Fraser Valley soil, 825
translocation of applied P, 875
- Lead
radionuclides in crops, 751
- Leaf and soil potassium
K deficiency of apple, 715
- Legumes
forages and aggregation, 165
- Lentil
N fertilization of intercropped legumes, 243
- Lessivage
variation saisonnière des éléments nutritifs dans
le sol, 785
- Linum usitatissimum*
Zn and P fertilizer on flax, 461
- Loss-on-ignition
bulk density in surface soils and peat, 895
- Lumbricus terrestris*
pratiques sylvicoles et vers de terre vs. struc-
ture du sol, 705
- Luvisol
organic C, N, P, and S in western Canadian
soils, 739
- Lysimeters
drainage from irrigated orchard lysimeters, 769
- Magnesium
Zn and P fertilizer on flax, 461
- Magnetite
oxygen plasma treatment of FE^{2+} -bearing
minerals, 433
- Maize
VA mycorrhizae and P, Zn absorption by maize,
97
yield of hydroponically and soil-grown maize,
295
- Management
soil aggregation in relation to field parameters,
835
- Manure
solid, cattle, effects of on soil fertility, 39
tillage and manure effect on soil aggregation, 489
- Matière organique
dissolution des composés ferrugineux et
alumineux, 451

- Mehlich III
EDTA and DTPA extractable P, 191
- Methane
water table levels and gas emissions from peat, 33
- Metribuzin
prediction of persistence of triazine herbicides, 587
- Metribuzin half-life
metribuzin persistence in soils, 711
- Microbial activity
effects of manure on soil fertility, 39
microbial biomass S as influenced by soil moisture, 889
- Microbial biomass
microbial biomass S as influenced by soil moisture, 889
microbial C, N, and P in mine spoils, 849
- Microbial turnover
crop residue decomposition, 63
- Micromorphometry
quantification of soil calcium carbonates, 677
- Microorganisms
microbially mediated fate of iodide in organic soils, 127
- Mine spoil
microbial C, N and P in mine spoils, 849
- Mineralizable-N soil tests
N fertilizer applied with wood shavings manure, 515
- Mineralization rates
crop residue decomposition, 63
- Minimum tillage
minimum tillage on chernozemic clay loam, 443
- Mn \times Cu \times S interaction
S \times Mn \times Cu nutrition of canola, 119
- Mobility
microbially mediated fate of iodide in organic soils, 127
- Modified rapid rotary sieve
aggregate breakdown in an MRRS, 817
evaluation of an MRRS, 813
- Moisture
denitrification in lowbush blueberry soils, 303
- Moisture-retention parameters
moisture retention in coarse-textured soils, 263
- Moisture tension
entrainment of sediment by wind, 79
- Monoammonium phosphate
penicillium bilaji increases canola P uptake, 425
- Monocropping
N fertilization of intercropped legumes, 243
- Monosaccharides
soil changes under minimum tillage, 481
- Morphological criteria
criteria for classifying Gleysolic soils, 153
- Morphology
saturated hydraulic conductivity from soil morphology, 1
- Mossbauer spectra
oxygen plasma treatment of Fe^{2+} -bearing minerals, 433
- Movement
translocation of applied P, 875
- Multivariate analysis
grouping soil units for fertility interpretations, 525
- Native N
fixation and immobilization of NH_4^+ in soils, 391
- Nitrate
denitrification in lowbush blueberry soils, 303
N and S mineralization/immobilization, 501
soil nitrate depth on soft white wheat production, 867
- Nitrate (NO_3)
fertilisation du tabac à cigarette, 779
- Nitrification
acid input to agricultural soils, 611
fate of applied ^{15}N in a Fraser Valley soil, 825
- Nitrogen
effect of placement method on N recovery, 543
fate of applied ^{15}N in a Fraser Valley soil, 825
N dynamics in Saskatchewan winters, 551
nitrogen translocation after urea addition, 437
placement effect on N urea utilization in drought, 381
spring and fall N, 199
- Nitrogen forms
sediment and runoff water characteristics, 639
- Nitrogen mineralization potential
effects of manure on soil fertility, 39
- Nitrogen-15
bean and pea N fixation over growing season, 695
effect of placement method on N recovery, 543
fixation and immobilization of NH_4^+ in soils, 391
placement effect on N urea utilization in drought, 381
- Nitrous oxide
denitrification in lowbush blueberry soils, 303
- No-till
minimum tillage on chernozemic clay loam, 443
- Nonexchangeable K
K and Mg dynamics in Quebec soils, 663
measurement of available K in Ontario soils, 597

- Nonexchangeable Mg
K and Mg dynamics in Quebec soils, 663
- Nuclear fuel waste
microbially mediated fate of iodine in organic soils, 127
- Nutrient cycling
nitrogen translocation after urea addition, 437
- Nutrient loss
sediment and runoff water characteristics, 639
- Nutrition
yield of hydroponically and soil-grown maize, 295
- Organic carbon
soil changes under minimum tillage, 481
- Organic horizons
root mat horizons in B.C. Podzols, 17
- Organic matter
effects of manure on soil fertility, 39
soil bulk density equations, 177
soil separates and ^{137}Cs , 171
tillage and manure effect on soil aggregation, 489
- Organic matter solubility
carboxyl solubility in organic soil titrations, 313
- Organic P
residual P solubility in a forested soil, 111
- Organic P leaching
P form and distribution in grassland and forest soils, 401
- Organic soil carboxyls
carboxyl solubility in organic soil titrations, 313
- Organic soil ion exchange
carboxyl solubility in organic soil titrations, 313
- Organic soil titration
carboxyl solubility in organic soil titrations, 313
- Organic soils
carboxyl solubility in organic soil titrations, 313
water table levels and gas emissions from peat, 33
- Orthophosphate
residual P solubility in a forested soil, 111
- Oxalate
residual P solubility in a forested soil, 111
- Oxalate-extractable Al
root mat horizons in B.C. Podzols, 17
- Partition coefficients for Mn in soil, 351
- Particle-size distribution
moisture retention in coarse-textured soils, 263
- Pea
bean and pea N fixation over growing season, 695
N fertilization of intercropped legumes, 243
- Peat fractions
hydrolysis of S in peat humic acids, 287
- Peat humic acid
hydrolysis of S in peat humic acids, 287
- Peatland
measurement of water depth in wells, 683
water table levels and gas emissions from peat, 33
- Pedogenic index
P form and distribution in grassland and forest soils, 401
- Penicillium bilaji*
penicillium bilaji increases canola P uptake, 425
- Periodate
influence of cropping on aggregation and carbohydrates, 373
- pH
denitrification in lowbush blueberry soils, 303
hydrolysis of dicalcium phosphate dihydrate, 689
- pH dependent solubility
carboxyl solubility in organic soil titrations, 313
- pH-dependent sorption
sulfate retention in Podzolic soils from Quebec, 337
tillage and manure effects on soil aggregation, 489
- Phaseolus vulgaris*
bean and pea N fixation over growing season, 695
effect of zinc addition on blackbeans, 367
- Phosphore
variation saisonnière des éléments nutritifs dans le sol, 785
- Phosphorus
P form and distribution in grassland and forest soils, 401
sediment and runoff water characteristics, 639
spring and fall N, 199
translocation of applied P, 875
VA mycorrhizae and P, Zn absorption by maize, 97
- Photodecomposition
metribuzin persistence in soils, 711
- Physical protection
crop residue decomposition, 63
- Fig slurry
effects of manure on soil fertility, 39
- Pinus radiata*
residual P solubility in a forested soil, 111
- Pipeline construction
effects of pipeline construction on soil horizons, 327
- Pisum sativum*
bean and pea N fixation over growing season, 695

- Placement
 effect of zinc addition on blackbeans, 367
- Plant N use-efficiency
 crop residue decomposition, 63
- Plant Zn
 zinc nutrition of forages and cereals, 473
- Podzol
 K and Mg dynamics in Quebec soils, 663
 soil bulk density equations, 177
 sulfate retention in podzolic soils from Quebec, 337
 zinc nutrition of forages and cereals, 473
- Polymers
 bonding efficiency of a polymeric soil conditioner, 579
- Porosity
 soil microporosity by CT scanning, 629
- Post-Wisconsinan weathering
 smectites in saprolite and tills, 879
- Potassium
 variation saisonnière des éléments nutritifs dans le sol, 785
- Potassium
 fixation and immobilization of NH_4^+ in soils, 391
- Potassium deficiency
 K deficiency of apple, 715
- Potassium exchange equilibria
 K exchange and fixation in Ontario soils, 649
- Potential soil loss
 soil erosion in the Lake Simcoe-Couchiching Basin, 137
- Pratiques sylvicoles
 pratiques sylvicoles et vers de terre vs. structure du sol, 705
- Predicted field persistence
 prediction of persistence of triazine herbicides, 587
- Profile descriptions
 persistence of tillage and compaction in a clay soil, 417
- Propagation time
 subsurface drains located by radar, 223
- Propagation velocity
 subsurface drains located by radar, 223
- Protein
 spring and fall N, 199
- Radionuclides
 partition coefficients for Mn in soil, 351
- Rainfall
 spring and fall N, 199
- Rainfall simulator
 freeze-thaw effects on soil erosion, 799
- Rape
 N fertilization of intercropped legumes, 243
- Réactifs d'extraction
 dissolution des composés ferrugineux et alumineux, 451
- Redox potential
 criteria for classifying Gleysolic soils, 153
- Reduced tillage
 tillage and manure effect on soil aggregation, 489
- Reflectometry
 correcting soil water content readings from IRAMS, 701
- Regional assessment
 soil erosion in the Lake Simcoe-Couchiching Basin, 137
- Repeated fertilizer applications
 N fertilizer applied with wood shavings manure, 515
- Residual effects
 N fertilizer applied with wood shavings manure, 515
- Residual P
 residual P solubility in a forested soil, 111
- Residue management
 ridge-tillage and soil moisture and temperature, 181
- Rock phosphate
 penicillium bilaji increases canola P uptake, 425
- Root channel
 root mat horizons in B.C. Podzols, 17
- Root mat
 root mat horizons in B.C. Podzols, 17
- Roots
 forages and aggregation, 165
- Row width
 metribuzin persistence in soils, 711
- Saline seep
 evaporite mineralogy and chemistry of a saline seep, 273
- Salinity methods
 conversion to EM38 readings to weighted EC_e values, 25
- Sand mineralogy
 soil parent materials in west Alberta, 721
- Saturated hydraulic conductivity
 saturated hydraulic conductivity from soil morphology, 1
- Saturated paste extract method
 conversion to EM38 readings to weighted EC_e values, 25
- Se in forages and cereals
 selenium in forages and cereals, 885

- Sediment quality**
sediment and runoff water characteristics, 639
- Sieving**
aggregate breakdown in an MRRS, 817
evaluation of an MRRS, 813
- Slurry**
manures as C sources for soil denitrifiers, 49
- Sodium selenate and selenite doped NH_4NO_3**
selenium in forages and cereals, 885
- Soft white wheat**
soil nitrate depth on soft white wheat production, 867
- Soil parent materials**
of northeast Alberta, 721
- Soil test**
measurement of available K in Ontario soils, 597
partition coefficients for Mn in soil, 351
- Soil test N**
soil nitrate depth on soft white wheat production, 867
- Soil-solution ratio**
adsorption-desorption of ^{14}C -fluridone, 567
- Solonetz**
effects of pipeline construction on soil horizons, 327
- Soluble salts**
evaporite mineralogy and chemistry of a saline seep, 273
- Source d'azote**
fertilisation du tabac à cigarette, 779
- Soxhlet weathering**
calibration of soxhlet soil chronofunctions, 213
- Soybean**
ridge-tillage and soil moisture and temperature, 181
- Spodosols**
soil bulk density equations, 177
- Spoil side**
effects of pipeline construction on soil horizons, 327
- Standard Gibbs free energy**
K exchange and fixation in Ontario soils, 649
- Structure**
bonding efficiency of a polymeric soil conditioner, 579
forages and aggregation, 165
- Structure du sol**
pratiques sylvicoles et vers de terre vs. structure du sol, 705
- Sulfate**
acid input to agricultural soils, 611
N and S mineralization/immobilization, 501
sulfate retention in Podzolic soils from Quebec, 337
- Sulphur × manganese × copper nutrition of canola**, 119
- Sulphur forms**
hydrolysis of S in peat humic acids, 287
- Surface coal mining**
microbial C, N and P in mine spoils, 849
- Tabac à cigarette**
fertilisation du tabac à cigarette, 779
variation saisonnière des éléments nutritifs dans le sol, 785
- Temperature**
conversion to EM38 readings to weighted EC_e values, 25
criteria for classifying Gleysolic soils, 153
hydrolysis of dicalcium phosphate dihydrate, 689
N and S mineralization/immobilization, 501
yield of hydroponically and soil-grown maize, 295
- Thin sections**
soil macroporosity by CT scanning, 629
- Thorium**
radionuclides in crops, 751
- Threshold shear velocity**
entrainment of sediment by wind, 79
- Thuringite**
oxygen plasma treatment of Fe^{2+} -bearing minerals, 433
- Till-plant**
ridge-tillage and soil moisture and temperature, 181
- Tillage**
persistence of tillage and compaction in a clay soil, 417
- Time domain**
correcting soil water content readings from IRAMS, 701
- Trace element levels**
soil parent materials of northeast Alberta, 721
- Translocation**
translocation of applied P, 875
- Trench**
effects of pipeline construction on soil horizons, 327
- Trioctahedral smectite**
smectites in saprolite and tills, 879
- Tube drain location**
subsurface drains located by radar, 223
- Uranium**
radionuclides in crops, 751
- Urea**
fertilisation du tabac à cigarette, 779
N dynamics in Saskatchewan winters, 551
nitrogen translocation after urea addition, 437

- Vermiculite
 - fixation and immobilization of NH_4^+ in soils, 391
- K exchange and fixation in Ontario soils, 649
- Vers de terre
 - pratiques sylvicoles et vers de terre vs. structure du sol, 705
- Vesicular-arbuscular mycorrhiza
 - forages and aggregation, 165
 - VA mycorrhizae and P, Zn absorption by maize, 97
- Volatile fatty acids
 - manures as C sources for soil denitrifiers, 49
- Volatility
 - metribuzin persistence in soils, 711
- Water quality
 - sediment and runoff water characteristics, 639
- Water soluble carbon
 - manures as C sources for soil denitrifiers, 49
- Water-stable aggregates
 - soil changes under minimum tillage, 481
- Water table
 - criteria for classifying Gleysolic soils, 153
 - water table levels and gas emissions from peat, 33
- Water use
 - drainage from irrigated orchard lysimeters, 769
- WEG
 - soil aggregation in relation to field parameters, 835
- Wells
 - measurement of water depth in wells, 683
- Wheat yield
 - weather sensitivity in western Canadian wheat, 857
- Winter rye
 - freeze-thaw effects on soil erosion, 799
- Work side
 - effects of pipeline construction on soil horizons, 327
- X-ray diffraction patterns
 - oxygen plasma treatment of Fe^{2+} -bearing minerals, 433
- Zea mays* L.
 - ridge-tillage and soil moisture and temperature, 181
- Zinc
 - effect of zinc addition on blackbeans, 367
 - VA mycorrhizae and P, Zn absorption by maize, 97
 - zinc nutrition of forages and cereals, 473
 - Zn and P fertilizer on flax, 461